

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1-17. (Canceled)

18. (Currently Amended) An apparatus for gasifying a solid material comprising:
a solvent removal chamber provided with an inlet port of a gasification solution
containing a first solid material and a solvent in which it is dissolved, a heating device that
vaporizes the solvent used to prepare the gasification solution by heating that solution, and an
exhaust port that removes the vaporization product of the solvent, and
a solid sublimation chamber either also used as the solvent removal chamber or arranged
communicably adjacent to it, and provided with a heating device that gasifies a second solid
material corresponding to the first solid material, separated by removal of the solvent, by
sublimation, and
wherein the solvent removal chamber and the following solid sublimation chamber are
arranged to be separated by an opening and closing partition.

19. (Canceled)

20. (Original) An apparatus for gasifying a solid material as set forth in claim 18, wherein
the combination solvent removal/solid sublimation chamber is provided with a heating device
capable of adjusting the heating temperature to vaporize the solvent used prepare the gasification
solution by heating it, and gasify the second solid material by sublimation.

21. (Original) An apparatus for gasifying a solid material as set forth in claim 18, wherein the solvent removal chamber and the solid sublimation chamber, or the combination solvent removal/solid sublimation chamber, are respectively composed of closed spaces.

22. (Original) An apparatus for gasifying a solid material as set forth in claim 18, wherein the solvent removal chamber or combination solvent removal/solid sublimation chamber is provided with a dissemination means that introduces the gasification solution in the form of fine droplets.

23. (Previously Presented) An apparatus for gasifying a solid material as set forth in claim 18, wherein the solvent removal chamber or the combination solvent removal/solid sublimation chamber additionally has a solid carrier to which the second solid material is adhered in the form of fine solid particles.

24. (Original) An apparatus for gasifying a solid material as set forth in claim 23, wherein the solid carrier is a porous material arranged in the solvent removal chamber.

25. (Original) An apparatus for gasifying a solid material as set forth in claim 24 additionally having a transport means that moves the porous material from the solvent removal chamber to the solid sublimation chamber.

26. (Original) An apparatus for gasifying a solid material as set forth in claim 23, wherein the solid carrier is a porous inner wall of the combination solvent removal/solid sublimation chamber.

27. (Original) An apparatus for gasifying a solid material as set forth in claim 23, wherein the solid carrier is composed of a porous metal material.

28. (Original) An apparatus for gasifying a solid material as set forth in claim 23, wherein the solid carrier is composed of a porous ceramic material.

29. (Original) An apparatus for gasifying a solid material as set forth in claim 18, wherein the solid sublimation chamber or combination solvent removal/solid sublimation chamber is additionally provided with a carrier gas inlet for transferring reactive gas generated by sublimation of the second solid material to a following treatment chamber.

30. (Original) An apparatus for gasifying a solid material as set forth in claim 18, wherein the first solid material is composed of at least one type of organometallic compound.

31. (Original) An apparatus for gasifying a solid material as set forth in claim 30, wherein the organometallic compound is selected from the group consisting of $\text{Pb}(\text{DPM})_2$, $\text{Zr}(\text{DPM})_4$, $\text{Ti}(\text{iPrO})_2(\text{DPM})_2$, $\text{Ba}(\text{DPM})_2$, $\text{Sr}(\text{DPM})_2$, $\text{Ta}(\text{O-Et})_4$ and $\text{Bi}(\text{DPM})_3$.

32-33. (Canceled)

34. (Currently Amended) An apparatus for forming a thin film from a solid material comprising:

a solvent removal chamber provided with an inlet port of a gasification-solution containing a first solid material and a solvent in which it is dissolved, a heating device that vaporizes the solvent used to prepare the gasification solution by heating that solution, and an exhaust port that removes the vaporization product of the solvent,

a solid sublimation chamber either also used as the solvent removal chamber or arranged communicably adjacent to it, and provided with a heating device that gasifies a second solid material corresponding to the first solid material, separated by removal of the solvent, by sublimation, and

a film formation chamber wherein the thin film is deposited on a treated substrate using as raw material the reactive gas generated from the second solid material in the solid sublimation chamber or combination solvent removal/solid sublimation chamber;

wherein the solvent removal chamber and the following solid sublimation chamber are arranged to be separated by an opening and closing partition.

35. (Currently Amended) An apparatus for forming a thin film from a solid material comprising;

a solvent removal chamber provided with an inlet port of a gasification solution containing a first solid material and a solvent in which it is dissolved, a heating device that vaporizes the solvent used to prepare the gasification solution by heating that solution, and an exhaust port that removes the vaporization product of the solvent,

a solid sublimation chamber either also used as the solvent removal chamber or arranged communicably adjacent to it, and provided with a heating device that gasifies a second solid material corresponding to the first solid material, separated by removal of the solvent, by sublimation, and

a film formation chamber wherein the thin film is deposited on a treated substrate using as raw material the reactive gas generated from the second solid material in the solid sublimation chamber or combination solvent removal/solid sublimation chamber;

said apparatus being provided with a gasification apparatus as set forth in any one of ~~claims 19 to 31~~ claims 20 to 31.